

IN THE SPECIFICATION

Please replace the paragraph on page 1, lines 11-14, with the following replacement paragraph:

The invention provides nucleotide sequences from coryneform bacteria which code for ~~maltate~~ malate dehydrogenase and a process for the fermentive preparation of amino acids using bacteria in which the mdhA gene is attenuated.—

Please replace the paragraph on page 2, lines 12-20, with the following replacement paragraph:

However, there remains a critical need for improved methods of producing L-amino acids and thus for the provision of strains of bacteria producing higher amounts of L-amino acids. On a commercial or industrial scale even small improvements in the yield of L-amino acids, or the efficiency of their production, are economically significant. Prior to the present invention, it was not recognized that attenuation of the mdhA gene encoding a ~~maltate~~ malate dehydrogenase would improve L-amino acid yields. Thus, the present inventors had the object of providing new methods for improved fermentative preparation of amino acids, in particular L-lysine.

Please replace the paragraph on page 2, lines 25-31, with the following replacement paragraph:

One object of the present invention, is providing a new process adjuvant for improving the fermentative production of L-amino acids, particularly L-lysine and L-glutamate. Such process adjuvants include attenuated bacteria, preferably attenuated Coryneform bacteria which express attenuated levels of the ~~maltate~~ malate dehydrogenase which is encoded by the mdhA gene.

Please replace the paragraphs on page 3, lines 1-25 with the following replacement paragraphs:

Thus, another object of the present invention is providing such a bacterium, which expresses attenuated amounts of the ~~maltate~~ malate dehydrogenase or gene products of the mdhA gene. Another object of the present invention is providing a bacterium, preferably a Coryneform bacterium, which expresses a polypeptide that has an attenuated ~~maltate~~ malate dehydrogenase activity.

Another object of the invention is to provide a nucleotide sequence encoding a polypeptide which has a ~~maltate~~ malate dehydrogenase sequence. One embodiment of such a sequence is the nucleotide sequence of SEQ ID NO: 2.

A further object of the invention is a method of making a ~~maltate~~ malate dehydrogenase or an isolated polypeptide having ~~maltate~~ malate dehydrogenase activity, as well as use of such isolated polypeptides in the production of amino acids. One embodiment of such a polypeptide is the polypeptide having the amino acid sequence of SEQ ID NO: 3. In one embodiment, the isolated polypeptide comprises at its N terminus the amino acid sequence of SEQ ID NO:1.

Other objects of the invention include methods of detecting nucleic acid sequences homologous to SEQ ID NO: 2, particularly nucleic acid sequences encoding polypeptides that have the activity of ~~maltate~~ malate dehydrogenase, and methods of making nucleic acids encoding such polypeptides.

Please replace the paragraph on page 9, lines 6-9 with the following replacement paragraph:

Preferably, a bacterial strain with attenuated expression of a mdhA gene that encodes a polypeptide with activity of ~~maltate~~ malate dehydrogenase will improve amino acid yield at least 1%.